

STEVEN ANTHONY SMITH 30075 NW CAPEHORN ROAD BUXTON, OREGON 97109 USA POWERFLEX DELUXE WALKING STICKS

SPECIFICATION

Please refer to Provisional Patent Application #60/405,889, filed on 08/26/02.

BACKGROUND

This invention is in the field of health and exercise. The idea came to me as a result of experimentation in my home environment of the Coast Range Mountains of northern Oregon. I have lived here on my 13 acres, surrounded by hundreds of acres of forestland, for 22 years. I hike around here almost every day. I started using a single walking stick, (just a fir branch I picked up from the ground), to ease the strain on my left knee, which had been injured in a motorcycle accident in 1966. As time went on, I discovered that using 2 sticks, one in each hand, was better. In fact, the more I used the 2 sticks together, the more I liked it. I could walk much farther with less pain in my knee. I also discovered that my upper body was becoming tighter, more toned. The only problem was that the dry fir branches that I was using would eventually break. Well, my supply of branches was virtually infinite, so I would just pick up another one. One day I decided to try some fresh, green branches so they would not break so easily. Since they were green, they would flex more than the dry branches. At first I didn't like the effect, ---- too much flex didn't give enough support. So I kept fine-tuning my choice of branches until I found the right amount of flex for my weight. The flex acts like shock absorbers on a car. It reduces strain on the joints of the body. So, for years I was using these walking sticks. Some people would laugh, but I didn't care because I knew they worked for me. Then I started thinking about a more durable stick. I made a few phone calls, and discovered that the technology already exists to create a lightweight, strong, durable, and slightly flexible shaft in either round or ribbon shape. Pole vault poles, fishing poles, golf clubs, hunting bows, ---- all of these must bend, but not break. The amount of stiffness can be easily modified in the manufacturing process. In August 2002 I filed a Provisional Patent application, and now I am filing this Nonprovisional Patent application.

SUMMARY

In summary, the main factor is the flexible, shock absorbing, power releasing shaft of my walking stick design. There are other walking sticks for sale in the marketplace right now. Most are one piece and stiff,---- rigid. These rigid sticks provide support, but are uncomfortable to use for extended periods. Some manufacturers use rubber tips on their sticks to provide some shock absorption. Others have tried using short, (less than 2 inches), metal springs inside the shaft. In fact, I have tried several different brands, from the cheapest to the most expensive. All of them are inferior to the green fir branches that I pick off my trees! My walking sticks, made of durable graphite, with plastic hand grips and rubber tips, having a flex of about 8 inches, (flex varies according to usage), will be a Cadillac compared to the "Model T's" currently available.

REFER TO DRAWING

Drawing #1, page #1 shows one POWERFLEX DELUXE WALKING STICK. They are designed to be used in pairs. They have a comfortable plastic handgrip similar to that of a ski pole, They have a replaceable rubber tip similar to that of a crutch or cane. The essence of the POWERFLEX DELUXE WALKING STICK is the flexible shaft, which absorbs shock and releases power as it alternately flexes and returns to original shape. They are slightly curved to ensure flex in the proper direction. Maximum flex is about 8 inches.

DETAILED DESCRIPTION OF THE INVENTION

POWERFLEX DELUXE WALKING STICKS are designed to be used in pairs in a manner similar to a cross country skier, (without the skis and snow of course). As you stride forward with your

LEFT FOOT, simultaneously extend the RIGHT HAND walking stick, then RIGHT FOOT with the LEFT HAND walking stick, and so on. That's all there is to it. You can put more or less pressure on the sticks as you walk, depending on how much strain you want to take off your lower body joints,----- ankle, knee, hip. By using one stick in each hand, you are adding a balanced upper body workout to the simple exercise of walking. And you are reducing strain on lower body joints. In addition, you are using more muscles, which, studies show, means you get the same exercise benefit walking 1 mile with sticks as you would walking 1.5 miles without them!

What makes POWERFLEX DELUXE WALKING STICKS unique is the curved and slightly flexible shaft. It acts as a shock absorber, and releases energy as it unflexes. The technology involved is the same as is currently used in making fishing poles, golf clubs, pole vault poles, or archery bows. The shape is slightly curved to ensure flex in the proper direction. The material used in the shaft is graphite and fiberglass, The handgrips are plastic. The tips are rubber. The stiffness of the flex is different for different weight classes of users. That is, a 110 pound person would need a less stiff version than a 250 pound person. Different lengths are required for different heights of the users.

POWERFLEX DELUXE WALKING STICKS may be used effectively on city sidewalks or hiking through the woods.

The best mode contemplated by me in carrying out my invention is to ----- 1, get the patent, 2, negotiate partnership agreement with a major local company in the field of exercise, 3, failing #2, manufacture and sell them myself.